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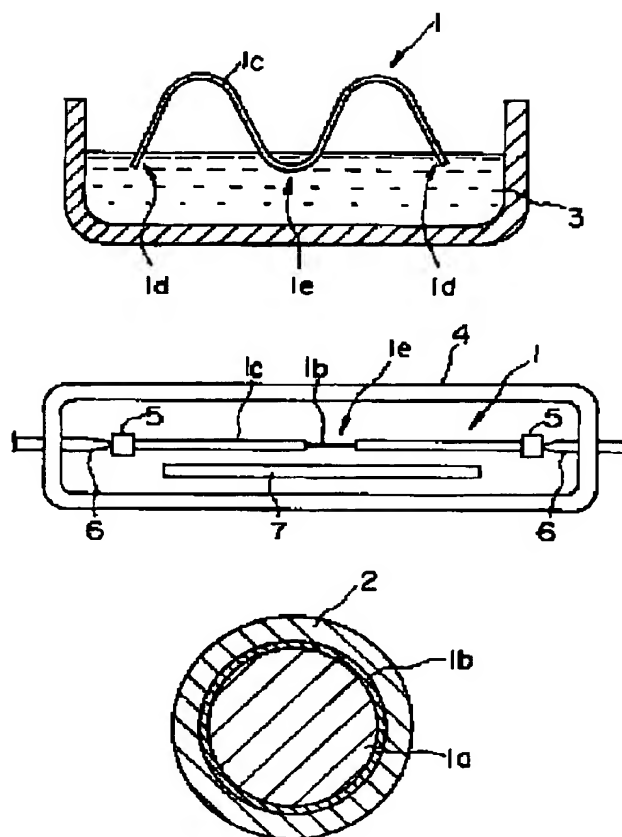
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TITLE : OPTICAL FIBER COATED WITH
MAGNETIC MATERIAL AND ITS
PRODUCTION



ABSTRACT : PURPOSE: To enable the easy formation of a slight magnetic material layer on the outer periphery of an optical fiber with good accuracy without impairing the mechanical strength and transmission loss of the optical fiber by forming the magnetic material layer on the periphery of a carbon coating layer formed on the periphery of a bare optical fiber and to improve the reliability.

CONSTITUTION: After the bare optical fiber 1a is formed by, for example, drawing, the carbon coating layer 1b is formed by a CVD method. In succession, a UV curing crosslinkable resin is applied thereon and is then irradiated with UV rays, by which a UV resin layer 1c is formed and the carbon coated optical fiber 1 is obt'd. The resin layer 1c of the magnetic material forming part 1e and both ends 1d, 1d of the carbon coated optical fiber 1 obt'd. in such a manner is then removed. The crosslinkable resin layer 1c is easily peeled by immersing the resin layer 1c in an org. solvent 3 to swell the resin layer and further, subjecting the resin layer to simple screening. The magnetic material layer 2 is then formed by electroplating on the surface of the magnetic material forming part 1e of the carbon coated optical fiber 1.

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